

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as shown below.

Please amend the paragraph beginning on page 16, line 19 and continuing on page 17 with the following amendment paragraph:

FIG. 14A explains that a light beam will be irradiated to the to-be-annealed object $[(n + i)]$ $(n - i)$ times when the area where a column and adjacent column overlap each other is [larger] smaller than a predetermined area and FIG. 14B explains that a light beam will be irradiated to the to-be-annealed object $[(n - i)]$ $(n + i)$ times when the area where a column and adjacent column overlap each other is [smaller] larger than the predetermined area.

Please amend the paragraph beginning on page 17, line 3, with the following amended paragraph:

FIG. 15 shows a relation among angles of rotation α , β and $[Y]$ γ and a relation between the angle of rotation $[Y]$ of the rotating shaft and number of times of irradiation to the to-be-irradiated object, in which FIG. 15A shows a relation among the angles of rotation α , β and $[Y]$ γ [and a relation among α , β and γ ,] and FIGS. 15B and 15C show a relation between the angle of rotation $[Y]$ of the rotating shaft and number of times of irradiation to the to-be-irradiated object.

Please amend the paragraph beginning on page 29, line 19 and continuing on page 30, with the following amended paragraph:

The laser annealing apparatus 1 constructed according to the present invention as above functions as will be described below. It should be noted that the laser annealing apparatus 1

anneals the to-be-annealed object 2 by irradiating the light beam to the entire main surface of the to-be-annealed object 2 n times $[(n > 0)]$ ($n > 0$).

Please amend the paragraph beginning on page 36, line 19, with the following amended paragraph:

The I times-irradiated region 31 has been irradiated with the light beam when the angle of rotation of the rotating shaft 7a is within a range from $[-2\gamma$ to $+2\gamma]$ $-\gamma$ to $+\gamma$.

Please amend the paragraph beginning on page 36, line 21, and continuing on page 37 with the following amended paragraph.

Also, one of the $i/2$ times-irradiated regions 32a and 32b has been irradiated with the light beam when the angle of rotation of the rotating shaft 7a is within a range from $[+2\gamma$ to $+2\beta]$ to $+\gamma$ to $+\beta$, and the other region has been irradiated with the light beam when the angle of rotation of the rotating shaft 7a is within a range from $[-2\beta$ to $-2\gamma]$ $-\beta$ to $-\gamma$.

Please amend the paragraph beginning on page 37, line 9, with the following amended paragraph:

When the controller 9 controls the solid-state laser 4 to make the pulse-on or -off operation as above, the moving stage 3 is moved over a distance $[\text{longer}]$ shorter than iL_1/n in the predetermined-distance moving direction, whereby a region where the overlapping columns 33 count $n/i + 1$ will be irradiated with the light beam $n+i/2$ times. Further, since the moving stage 3 is moved over a distance $[\text{shorter}]$ longer than iL_1/n , a region where the overlapping columns 33 count $[i - 1]$ $n/i - 1$ will be irradiated with the light beam $n - i/2$ times. Therefore, the error with respect of the number n of times of light beam irradiation to the whole to-be-irradiated object 2 can easily be reduced to $\pm i/2$ times.

Please amend the paragraph beginning on page 38, line 2, with the following amended paragraph:

When $n = 4$, for example, with the above-mentioned conditions, the moving stage 3 is moved over a distance of $L_1/2$ in the predetermined-distance moving direction. When the moving stage 3 is moved over a distance [smaller] larger than $L_1/2$ in the predetermined-distance moving direction, a region irradiated three times will take place on the to-be-annealed object 2 as shown hatched in FIG. 17A. On the other hand, when the moving stage 3 is moved over a distance [larger] smaller than $L_1/2$, a region irradiated 5 times will occur on the to-be-annealed object 2 as shown hatched in FIG. 17B. Therefore, the error of number of times of light irradiation to the to-be-annealed object 2 will be ± 1 . It should be noted that FIGS. 17A and 17B schematically illustrate the relation between a position on the to-be-annealed object 2 in the predetermined-distance moving direction and number of times of light beam irradiation and the number of squares in the direction of arrow z in FIGS. 17A and 17B indicate a number of times of light irradiation.

Please amend the paragraph beginning on page 39, line 14 with the following amended paragraph:

Note that γ is determined based on the ratio between the length, in the predetermined-distance moving direction, of the i times-irradiated region 31 and those, in the predetermined-distance moving direction, of the $i/2$ times-irradiated regions 32a and 32b. For example, when the ratio between the length, in the predetermined-distance moving direction, of the i times-irradiated region 31 and that, in the predetermined-distance moving direction, of one (32a) of the $i/2$ times-irradiated regions is R , γ is determined by solving $[2\beta/\gamma = R]$ $2\gamma(\beta-\gamma)$.

Please amend the paragraph beginning on page 43, line 21 and continuing on page 44 with the following amended paragraph:

As having been described in the foregoing, when the moving stage 3 is moved over a distance shorter than desired in the predetermined-distance moving direction and an area of overlapping between adjacent columns is increased even when n is an odd number because the column 60 to be irradiated with the light beam i times ($i = 3$) is formed, the error in number of times of light beam irradiation is +1. When the moving stage 3 is moved over a distance [shorter] longer than desired in the predetermined-distance moving direction and an area of overlapping between adjacent columns is decreased in the above condition, the error in number of times of light beam irradiation is -1.

Please amend the paragraph beginning on page 44, line 9, with the following amended paragraph:

For example, when $n = 5$ is set in the method shown in FIG. 20, a region to be irradiated with the light beam four times will take place as shown hatched in FIG. 22A if the moving stage 3 is moved over a distance [shorter] longer than $3L_2/4$ in the predetermined-distance moving direction after the column 60 is formed. On the other hand, if the moving stage 3 is moved over a distance [longer] shorter than $3L_2/4$ in the predetermined-distance moving direction, a region to be irradiated with the light beam six times will occur as shown hatched in FIG. 22B. Therefore, the error in number of times of light beam irradiation is ± 1 .

AMENDMENTS TO THE DRAWINGS

Three (3) attached sheets of drawings include changes to Fig. 13, Fig. 20, Fig. 21, Fig. 22A, and Fig. 22B. The changes to these Figures are as follows.

Sheet 1 includes Fig. 13 – Please change reference numerals E/10 to E/5.

Sheet 2 includes Figs. 20 and 21 – Fig. 20 please change reference numeral “ $L_{1/2}$ ” to $L_{1/4}$ – and in Fig. 21 please change reference numeral “ $3 L_2/8$ ” to – $3 L_1/8$ and “ $3 L_2/4$ ” to -- $3L_2/8$ --

Sheet 3 includes Figs. 22A and 22B – Fig. 22A please change reference numeral “ $L_{1/2}$ ” to $L_{1/4}$ “ and in Fig. 22B please change reference numeral “ $L_{1/2}$ ” to $L_{1/4}$ ”

Attachment: Three (3) Replacement sheets